

ABSTRACT OF THE DISCLOSURE

In a fluid leakage detection apparatus, hydrogen is supplied from a hydrogen tank to an FC stack of a fuel cell via first and second pipes. An inlet valve is provided between the hydrogen tank and the first pipe, and an outlet valve is provided between the first pipe and the second pipe. A controller serves to control valve opening and valve closing operation of the inlet and outlet valves, respectively. Those valves are closed in a state where the pressure within the hydrogen tank is made lower than the pressure within the first pipe, and the pressure within the second pipe is made lower than the pressure within the first pipe by operating those valves. Thereafter, the increase or decrease in the pressure within the first pipe is detected by a pressure gauge such that the leakage in the inlet valve or the outlet valve is determined. This makes it possible to detect the leakage both in the inlet valve and the outlet valve at the same time.